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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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SUMMARY

Total deliveries' stronger growth in the past several months—up 2.8 percent for June and 3.1 percent for the second quarter—contributed to petroleum's growing share of total energy consumption for the first half; the increased reliance on petroleum was a continuation of last year's reversal of a nearly ten-year decline. A principal contributor to the first half deliveries increase of 2.1 percent was unexpectedly strong growth in gasoline demand—up 3.9 percent in the second quarter and 2.4 percent for the first six months. Strong demand from the petrochemical sector has also led to substantial growth in demand for other oils.

Residual fuel oil deliveries, however, fell nearly 8 percent for the half after rising over 20 percent for the previous six months. Excluding residual fuel oil and its fuel-switching-related swings, deliveries of all other products rose 3.0 percent in 1987's first half—double the rate of last year's first half and continuing the growth rate of the second half, when lower prices were beginning to encourage greater consumption.

Natural gas liquids production has recovered somewhat from last year's low point as the economics of liquids extraction from natural gas streams have improved. Crude oil production, however, slipped below 8.4 million B/D in June, down more than 800 thousand B/D from early 1986 levels.

Due to inventory shifts, June's imports were almost even with last June's high level, and the first six month's 7.5 percent increase was only about half the rate indicated by rising demand and falling crude oil production. Input to distillation units at refineries nearly matched last June's recent-year record for that month, though a lower-gravity crude slate apparently shifted product yields towards heavier products. Inventories ended the month at the lowest level in more than a decade, an indication of caution with regard to the uncertain behavior of OPEC and its members.

PRODUCTS SUPPLIED [1/]

Total Energy

RELIANCE ON OIL CONTINUES TO GROW. Continuing last year's reversal, petroleum's share of total energy consumption again rose in the first half of 1987 compared with the first half of 1986 (see table on page 2). Until last year, oil's share had declined from nearly half in 1977 to a little over 43 percent in 1986. Because of seasonal differences in the consumption of the various energy sources, the first half's share is typically less than for the year as a whole; this explains why oil's share of about 43 percent in the first six months of 1987, though more than a percentage point greater than for a year ago, is somewhat less than for 1986 as a whole.

Petroleum's increased share, as in 1986, came at the expense of coal and natural gas, though some fuel switching back to gas in recent months has reduced the loss for that fuel. "Other" energy also increased its share in the first half, primarily because of additions to nuclear generation capacity.

Though total energy usage declined slightly for the first half, this was due to a large first quarter drop for natural gas stemming in part from warmer weather in the Midwest; second quarter energy consumption is believed to have increased over the year-ago period, though data as of yet are incomplete.

API ESTIMATES	JUNE		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.5	2.8	16.4	2.1
Crude oil production[2/]	8.4	(3.1)	8.4	(6.1)
Total imports[3/]	6.7	(0.8)	6.0	7.5
Stocks (million bbl)[3/]	1,015	(2.5)	na	na

ESTIMATED ENERGY CONSUMPTION AND SHARES BY TYPE

Consumption (Quadrillion BTU)

	Coal	Natural Gas	Petroleum	Other	Total
First half 1986	8.5	9.5	15.8	4.0	37.7
First half 1987	8.3	9.0	16.1	4.1	37.6
Change	-0.2	-0.5	+0.3	+0.2	-0.2
Percent change	-2.1%	-4.9%	+2.1%	+4.1%	-0.4%

Market Shares (Percent)

First half 1986	22.5	25.1	41.8	10.6	100.0
First half 1987	22.1	24.0	42.9	11.0	100.0
Percentage point change in share	-0.4	-1.1	+1.1	+0.4	

Note: Figures rounded independently; calculations based on unrounded data.
Sources: Department of Energy, API estimates.

Gasoline

LOWER PRICES STILL HAVING AN EFFECT. Continued strength in June's deliveries of motor gasoline, which rose 3.4 percent, helped to push deliveries for the first half to nearly 7.1 million B/D, up 2.4 percent over the first six months of 1986. The second quarter's growth in deliveries, in particular, was unusually strong. Though the first half's growth rate was less than the over 4 percent rise of the latter half of 1986, it was still higher than anticipated by most analysts and slightly exceeded first half 1986's 1.9 percent rise, a period in which the large price decline had only begun to have its effect.

The lower gasoline prices of the past year appear to be the main factor behind gasoline deliveries' growth. Changes in real disposable income, about even in the first half of 1987 compared with a year ago, have not provided any significant boost to demand. But inflation-adjusted retail prices still one fourth lower than two years ago and half the early 1981 peak have encouraged additional driving; miles travelled in the first half are estimated to be nearly 5 percent higher than for the first six months of 1986.

Distillates

FIRST HALF ALMOST EQUALS LAST YEAR. In contrast with the weak performance of recent previous months, distillate deliveries jumped 9.2 percent, or over 200 thousand B/D, in June. Erratic deliveries patterns in the past several months, more likely due to nonprimary inventory movements this year and last than to unusual swings in consumption, have obscured the underlying trend. However, with June's strong increase, first half deliveries were almost even with those of the first six months of last year, falling more into line with indications that consumption has been stable so far this year. Increases in truck and rail usage in the first half of from 1 to 2 percent, small increases in industrial consumption, a decline for farm use, and stable residential and commerical consumption together indicate that distillate consumption continues to be flat or rising slightly.

Residual Fuel Oil

BUNKERING AND FUEL SWITCHING BOTH AID DELIVERIES DECLINE. Though residual fuel oil deliveries have been showing declines compared with the year-ago months—and June's over 15 percent decline was no exception—the reversal of last year's price-induced fuel switching to residual fuel oil apparently has not been complete. Higher residual fuel oil prices this year, combined with spot natural gas prices that have remained near 1986's low levels, have at least partly reduced residual fuel oil use, particularly at electric utilities. But for the year to date, deliveries have fallen about 8 percent, down only about two thirds of the way towards the level of first half 1985, before last year's significant oil price decline caused switching to residual fuel oil.

Vessel bunkering at U.S. ports has also been declining this year, as ships engaged in foreign trade have shifted to fuel sources outside the U.S. Of the roughly 100 thousand B/D decline in residual fuel oil deliveries in the first half, about one third is attributable to reduced bunker fuel deliveries and the rest to fuel switching.

Kerosine Jet Fuel

FIRST HALF RISES ALMOST 7 PERCENT. Kerosine jet fuel deliveries rose a scant 0.3 percent in June year to year, but first half deliveries nevertheless registered an increase of nearly 7 percent. Though on a monthly basis, deliveries track air traffic trends only moderately well at best, June's reduced growth coincides, at least directionally, with recent smaller increases in jet traffic. Miles flown had surged ahead in the first four months of the year at an average 9 to 10 percent, only somewhat less than last year's nearly 12 percent rise. But traffic data for May, the latest available, indicate only about a 6 percent increase more recently, with both domestic and international flights experiencing slower rates of growth in that month.

Other Oils

PROPANE STRENGTH CONTRIBUTES TO DELIVERIES RISE. Products supplied in the "other oils" category in June 1987 are estimated to be 4,070 thousand B/D, an increase of 4.6 percent from June 1986, somewhat less than those for April and May. Nonetheless, the second quarter of 1987 registered a robust 7.2 percent increase, substantially higher than the 2.8 percent recorded for the first quarter. For the first half of the year, deliveries of other oils rose 5.0 percent from the levels of 1986.

The propane market, comprising almost one-fourth of "other oils" supplied, accounts for nearly all of the strength in this category. Propane deliveries are up an estimated 15-20

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

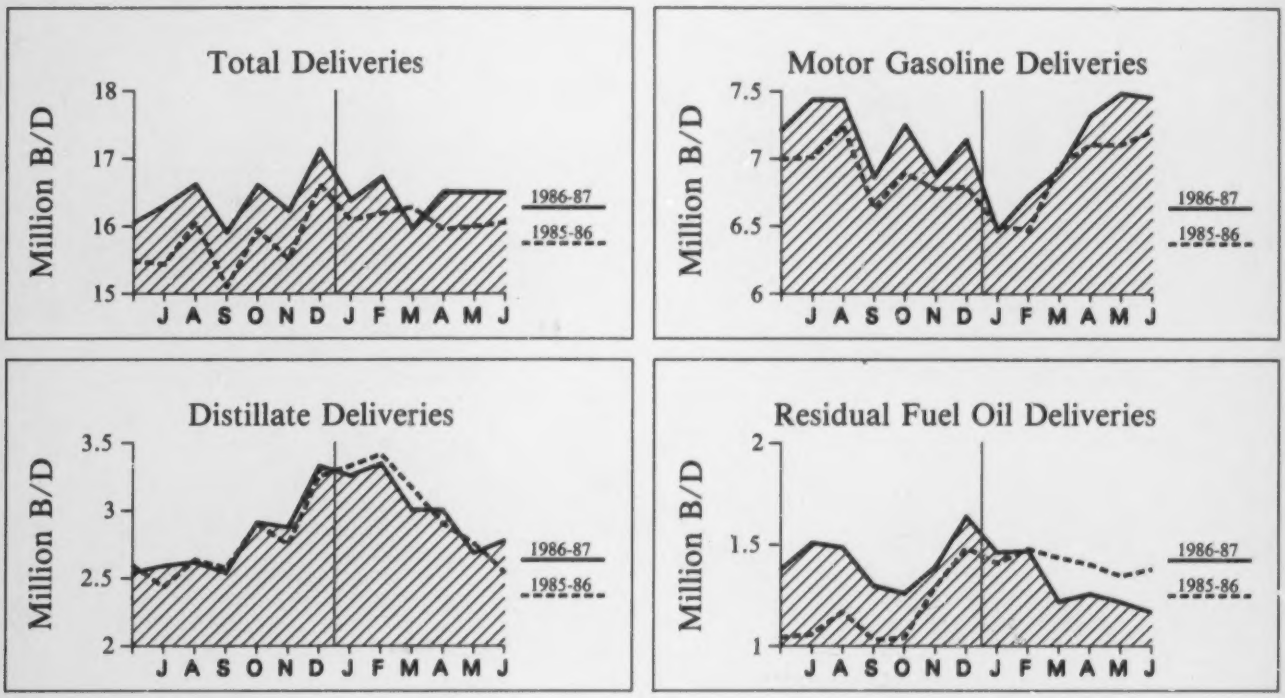
Products Supplied/Supply From Primary Storage	2nd QUARTER		
	1987[1]	1986[2]	% Change
Products Supplied:			
Total motor gasoline	7,418	7,140	3.9
Finished leaded motor gasoline*	1,855	2,332	(20.5)
Finished unleaded motor gasoline*	5,563	4,808	15.7
Naphtha-jet	206	202	2.0
Kerosine-jet	1,113	1,074	3.6
Distillate fuel oil	2,823	2,737	3.1
Residual fuel oil	1,213	1,374	(11.7)
All other oils[3]	4,002	3,732	7.2
Reclassified[4]	- 280	- 263	6.5
Total domestic products supplied	16,495	15,996	3.1
Exports	836	738	13.3
Total products supplied	17,331	16,734	3.6
Supply:			
Domestic production:			
Crude oil[5]	8,410	8,776	(4.2)
Natural gas liquids	1,597	1,523	4.9
Other supply[6]	883	801	10.2
Total domestic supply	10,890	11,100	(1.9)
Imports:			
Crude oil, total	4,351 9/	4,137 9/	5.2
Canadian	593	611	(2.9)
Other	3,758	3,526	6.6
Products, total	1,806	2,041	(11.5)
Residual fuel oil	545	644	(15.4)
Other	1,261	1,397	(9.7)
Total imports	6,157	6,178	(0.3)
Total supply	17,047	17,278	(1.3)
Stock change, all oils	- 284	+ 544	XXXX
Refinery Operations			
Input to crude oil distillation units	12,865	13,090	(1.7)
Operable capacity	15,635	15,474	1.0
Refinery utilization (%)[7]	82.3%	84.6%	(2.7)
Crude oil runs	12,737	13,020	(2.2)

Stocks (millions bbls.)	2nd QUARTER		
	1987[8]	1986[2]	% Change
Crude oil	324.6 9/	326.7 9/	(0.6)
Unfinished oils	104.2	108.4	(3.9)
Total motor gasoline**	230.9	230.5	0.2
Finished leaded motor gasoline*	56.6	74.1	(23.6)
Finished unleaded motor gasoline*	135.7	121.6	11.6
Naphtha-jet	7.1	6.6	7.6
Kerosine-jet	38.0	39.7	(4.3)
Distillate fuel oil	103.7	107.9	(3.9)
Residual fuel oil	39.1	42.8	(8.6)
All other oils	167.0	178.5	(6.4)
Total all oils	1,014.6	1,041.1	(2.5)

1/ Source: U.S. Department of Energy, April; May-June, API.
2/ Source: U.S. Department of Energy.
3/ Includes crude losses.
4/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
5/ Includes lease condensate.
6/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
7/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
8/ Derived by interpolating API weekly stocks data.
9/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

percent for June, consistent with that of the second quarter as a whole, and similar to the 16.6 percent increase estimated for the first quarter. Recent oil price increases enabled it to recapture the market share of the olefin (especially ethylene) market which it had lost to naphtha and gasoil. Last year's oil price decline had made these fuels more competitive petrochemical feedstocks, displacing significant amounts of propane and ethane. Unusually mild weather also contributed to last year's weak demand, enabling propane to register significant increases in 1987.

In contrast to the steady strength exhibited by propane, many of the other products in this category experienced minimal year-to-year increases during the first quarter before firming up in the second. Much of the latest quarter's acceleration in the growth rate of "other oils" can be attributed to significant increases in deliveries of naphtha, butanes, and petroleum coke, all of which had been particularly weak in the first quarter.



SUPPLY [1/]

Production

SOME RECOVERY FOR GAS LIQUIDS BUT CRUDE STILL DOWN. Domestic crude oil production slipped below 8.4 million B/D in June to more than 800 thousand B/D or 9 percent below last February's recent-year peak. Recent increases in exploration and drilling activity have been relatively minor in comparison to last year's decline. The 169 seismic exploration crews active in June were up from a low of 150 last summer but were less than one half of 1985's level and one fourth of the 1981 average; similarly, about 100 more rigs were active in June than at last year's low point, but June's activity was still off 60 percent compared with 1985 and was only one fifth of the average for 1981. Servicing of existing wells, too, remains well below levels of a few years ago, down more than 40 percent compared with 1981 levels.

Natural gas liquids production, which had fallen below 1,450 thousand B/D last August, has risen since that time to about 1,600 thousand B/D in June. Last year's oil price decline had made the economics of extracting natural-gas-derived feedstocks less attractive relative to those from oil, and liquids production slipped. This year, oil prices have edged upwards and petrochemical demand has been strong, both contributing to some recovery in liquids extraction.

Imports

INVENTORY SHIFTS OBSCURE TRENDS. Imports, after declining for several months from last August's recent-year peak of 7.1 million B/D, then inching upwards in April and May, rose sharply in June over the prior month. Up 750 thousand B/D from May, June's 6.7 million B/D of imports came close to last June's high level. But while more than 1 million B/D of last June's imports were used to build inventories, almost all of this year's imports went to satisfy higher domestic demand and compensate for reduced domestic production.

Compared with the first half of last year, deliveries have been over 300 thousand B/D higher so far in 1987, and domestic production more than 500 thousand B/D lower. While these trends would have ordinarily led to an increase in imports roughly double the 7.5 percent first half increase, an inventory drawdown this year, coupled with a major buildup last year, served to obscure the underlying trend in imports. Since the first half of 1985, higher demand and lower domestic production have increased imports for the first six months by about 1.3 million B/D or 27 percent.

Though this June's imports were nearly the same as last June's, crude oil imports were over 260 thousand B/D higher and product imports correspondingly lower by about 320

thousand B/D. Residual fuel oil imports, in particular, fell over 270 thousand B/D year to year as refinery production of this fuel rose despite lower demand. Imports of gasoline and components also fell by 41 thousand B/D to 441 thousand B/D.

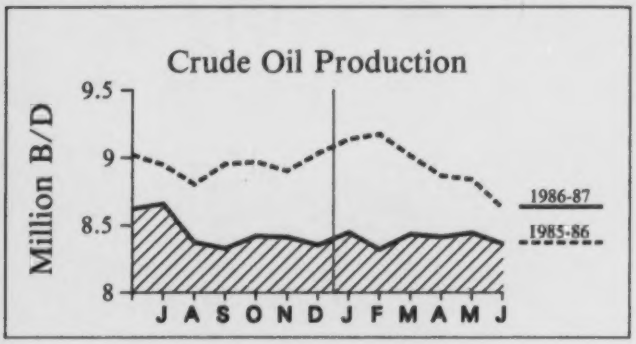
Refinery Operations

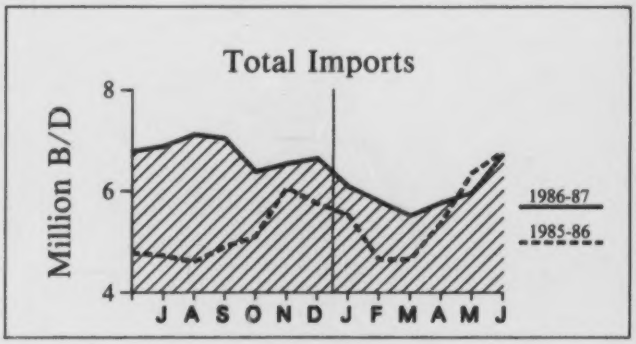
INPUT NEARLY MATCHES LAST JUNE. Input to distillation units in June nearly matched that of a year ago, but because of somewhat higher operable capacity, utilization dropped about a percentage point from last June's recent-year record for that month. Though production of gasoline and distillate both held steady, residual fuel oil output rose over 5 percent, an indication of a heavier crude slate this June than last.

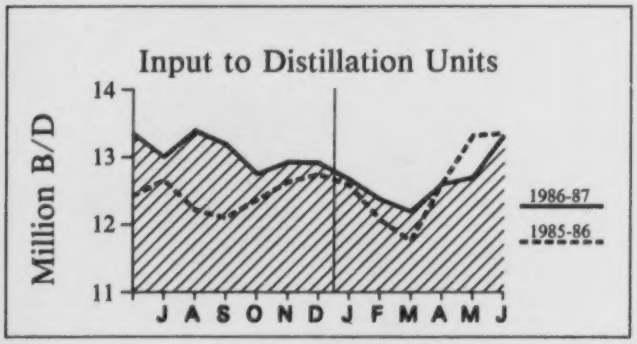
Operable refining capacity, which had declined by almost 3 million B/D from 1981 to 1985 at a time when percentage utilization rates were generally only in the 60s and 70s, declined only slightly in 1986, and has risen slightly—100 to 200 thousand B/D—so far this year. Downstream capacity, not included in the operable capacity measure but necessary to produce gasoline and other products of sufficient quality and quantity, has continued the expansion experienced last year as refiners adjust to lower lead levels mandated for gasoline.

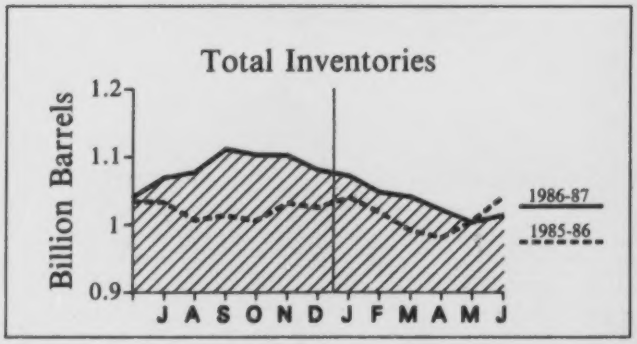
Inventories

STOCK LEVELS INDICATE CAUTION. Total stocks rose 11 million B/D during June, the first month-to-month increase since last September but an about-average increase for the month. Even so, total inventories were at the lowest June level in more than a decade, a sign of caution in regard to uncertain OPEC behavior. Crude stocks rose only slightly, and at 325 million barrels, remained in the lower end of the range of the last several years. Gasoline stocks remained steady, a not particularly unusual development for June, though distillate stocks' 5 million barrel rise was somewhat less than the 9 million barrel average of the previous five years.









1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 527 million barrels as of June 30, 1987).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	JUNE			YEAR-TO-DATE		
	1987[1]	1986[2]	% Change	1987[3R]	1986[2]	% Change
Products Supplied:						
Total motor gasoline	7,455	7,209	3.4	7,063	6,895	2.4
Finished leaded motor gasoline*	1,826	2,296	(20.5)	1,794	2,247	(20.2)
Finished unleaded motor gasoline*	5,629	4,913	14.6	5,269	4,648	13.4
Naphtha-jet	212	215	(1.4)	199	197	1.0
Kerosine-jet	1,109	1,106	0.3	1,139	1,068	6.6
Distillate fuel oil	2,779	2,544	9.2	3,010	3,017	(0.2)
Residual fuel oil	1,166	1,377	(15.3)	1,297	1,406	(7.8)
All other oils[4]	4,070	3,891	4.6	3,983	3,794	5.0
Reclassified[5]	- 298	- 293	1.7	- 271	- 288	(5.9)
Total domestic products supplied	16,493	16,049	2.8	16,420	16,089	2.1
Exports	793	642	23.5	840	779	7.8
Total products supplied	17,286	16,691	3.6	17,260	16,868	2.3
Supply:						
Domestic production:						
Crude oil[6]	8,359	8,623	(3.1)	8,392	8,940	(6.1)
Natural gas liquids	1,606	1,504	6.8	1,602	1,596	0.4
Other supply[7]	947	952	(0.5)	916	851	7.6
Total domestic supply	10,912	11,079	(1.5)	10,910	11,387	(4.2)
Imports:						
Crude oil, total	4,835 10/	4,571 10/	5.8	4,143 10/	3,623 10/	14.4
Canadian	582	576	1.0	569	555	2.5
Other	4,253	3,995	6.5	3,574	3,068	16.5
Products, total	1,894	2,213	(14.4)	1,840	1,945	(5.4)
Residual fuel oil	439	712	(38.3)	577	631	(8.6)
Other	1,455	1,501	(3.1)	1,263	1,314	(3.9)
Total imports	6,729	6,784	(0.8)	5,983	5,568	7.5
Total supply	17,641	17,863	(1.2)	16,893	16,955	(0.4)
Stock change, all oils	+ 355	+1,172	XXXX	- 367	+ 87	XXXX
Refinery Operations						
Input to crude oil distillation units	13,307	13,347	(0.3)	12,642	12,617	0.2
Operable capacity	15,621	15,465	1.0	15,635	15,475	1.0
Refinery utilization (%)[8]	85.2%	86.3%	(1.3)	80.9%	81.5%	(0.7)
Crude oil runs	13,139	13,261	(0.9)	12,529	12,505	0.2

Stocks (millions bbls.)	1987		1986[2]	% Change from . . .	
	Jun. 30[9]	May 31[9]	Jun. 30	Previous Month	Year Ago
Crude oil 10/	324.6	323.3	326.7	0.4	(0.6)
Unfinished oils	104.2	104.2r/	108.4	-	(3.9)
Total motor gasoline**	230.9	231.3	230.5	(0.2)	0.2
Finished leaded motor gasoline*	56.6	57.8	74.1	(2.1)	(23.6)
Finished unleaded motor gasoline*	135.7	134.6r/	121.6	0.8	11.6
Naphtha-jet	7.1	7.2	6.6	(1.4)	7.6
Kerosine-jet	38.0	39.1	39.7	(2.8)	(4.3)
Distillate fuel oil	103.7	99.1r/	107.9	4.6	(3.9)
Residual fuel oil	39.1	40.9	42.8	(4.4)	(8.6)
All other oils	167.0	158.8r/	178.5	5.2	(6.4)
Total all oils	1,014.6	1,003.9r/	1,041.1	1.1	(2.5)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-April, U.S. Department of Energy, May-June, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.